

CLAIMS

1. An image-processing device, comprising:

an input device that inputs video signals of an
5 original color image; and

an image-processing unit that carries out a
predetermined image altering process on luminance
components of said video signals;

wherein said luminance components, subjected to
10 said image altering process, and color-difference
components of said video signals are combined, so that video
signals for an illustrational image in which the outlines
of image features are made bold, and the number of colors
is reduced with respect to the number of colors in said
15 original color image, are generated.

2. A device according to claim 1, wherein said image
altering process includes filtering processes in which a
low-pass filter and an edge-enhancement filter are used to
filter said luminance components, and a
20 gradation-reduction process that reduces the steps of said
luminance components.

3. A device according to claim 2, wherein said
filtering processes are recursively carried out for a
plurality of times.

25 4. A device according to claim 2, wherein said

image-processing unit further carries out a resolution reduction process that reduces the number of pixels in said original color image before carrying out said filtering processes and a resolution restoring process that restores the number of pixels to said number of pixels in said original color image after carrying out said filtering processes.

5. A device according to claim 4, wherein said image-processing unit carries out said resolution restoring process after carrying out said gradation-reduction process.

6. A device according to claim 4, wherein said image-processing unit carries out said resolution restoring process before carrying out said gradation-reduction process.

7. A device according to claim 2, wherein said image-processing unit carries out said low-pass filtering process, said edge-enhancement filtering process, and said gradation-reduction process in this order in a first mode, and

wherein said image-processing unit carries out a resolution reduction process that reduces the number of pixels in said original color image, said low-pass filtering process, said edge-enhancement filtering process, said gradation-reduction process, and a resolution

restoring process that restores the number of pixels to said number of pixels in said original color image, in this order in a second mode.

8. An image-processing method that comprises steps of:
5 inputting video signals of an original color image;
carrying out a predetermined image altering process
on luminance components of said video signals; and

combining said luminance components that have been
subjected to said image altering process, and
10 color-difference components of said video signals for
generating video signals for an illustrational image in
which the outlines of image features are made bold and the
number of colors is reduced with respect to the number of
colors in said original color image.

15 9. A computer program product for image processing that
comprises:

an input module that inputs video signals of an
original color image; and

an image-processing module that carries out a
20 predetermined image altering process on luminance
components of said video signals;

a signal composition module that combines said
luminance components, subjected to said image altering
process and color-difference components of said video
25 signals for generating video signals for an illustrational

image in which the outlines of image features are made bold and the number of colors is reduced with respect to the number of colors in said original color image.